

precisely define the present invention. The applicants respectfully traverse the rejection of the Examiner based on the amendment and the following detailed explanation.

The present invention discloses a novel arrangement in an electroacoustic transducer utilized in an apparatus such as a cell phone. In particular, both the useful magnetic field and the stray magnetic field generated by the same magnet system are used for both the sound and vibration generating means. More specifically, the sound generating means is placed in one of the two magnetic fields, and the vibration generating means is placed in the other of the two magnetic fields, as defined in amended independent claim 10. With such an inventive arrangement, the transducer is more compact and simple in structure as compared to the cited Rollins patent and other prior art, because both the useful field and the stray field of the same magnetic system are being utilized. Preferably, the sound generating means is placed in the useful magnetic field, while the vibration generating means is placed in the stray field, as defined in claims 1 and 11. In a preferred embodiment, the magnetic system is ring-shaped, thus the useful magnetic field is located at the inner peripheral area while the stray magnetic field is located at the outer peripheral area (claims 4, 9, 14, 15).

The applicants respectfully disagree with the assertion of the Examiner that the present invention as defined in independent claims 1, 6 and 10 is anticipated by Rollins et al (US Patent 4,931,765). Rollins et al discloses a radio pager having a unitary housing for accommodating both the sound generating means and the vibration generating means. Rollins, however, does not disclose or imply that both the useful magnetic field and the stray magnetic field generated by the same magnet system are used for both the sound and vibration generation, as defined in claims 1, 6 and 10. In fact, as illustrated in figures 5 and 6 where the tone generator also uses a magnet

system, different magnets are used for sound (tone) generating means and for vibration generating means, respectively, and both the tone generating means and the vibration generating means shown in Figures 5 and 6 are apparently placed in the useful magnetic field of respective magnet (but NOT in the stray magnetic field as asserted by the Examiner). This is logical and reasonable since each magnet works for either only the tone generating means or only the vibration generating means, and there is no need to make use of a stray magnet field which usually has less magnetic strength. In other words, Rollins does not disclose or imply to place either the sound generating means or the vibration generating means in the stray magnetic field. Because two separate magnet systems are used (Figs. 5 and 6), the transducer in Rollins is not as compact and simple in structure as in the present invention.

Therefore, the applicants believe that the present invention defined in claims 1, 6 and 10, with the distinguishing feature that the sound generating means or the vibration generating means is placed in the stray field generated by the magnet system, is not anticipated by Rollin et al under 35USC §102(b), and claims 1, 6 and 10 are thus believed patentable. At the least for the same reasons, claims 2-5, 7-9 and 11-20 are also patentable as each of them includes all the limitations of one of the three independent claims 1, 6 and 10.

In particular, claims 2 and 7 more specifically define a feature that two vibration generating coils are arranged in the stray field area, which, as explained in the above, can not be found anywhere in Rollins patent. Claims 3, 8, 12 and 13 further define that a metal part is mechanically connected to the coils, and the metal part comprises a soft-magnetic material. This is not disclosed in Rollins as asserted by the Examiner. To the contrary, the flat disk 23, which is mechanically connected to the windings 17-19, is of a “thermal plastic material” (col. 2, lines 37-38). Moreover,

claims 4, 9, 14-16 further define that the magnet system is ring-shaped with the stray magnetic field emanating from its outer peripheral area, and the vibration generating coil is arranged coaxially with the magnet system. This is not disclosed in Rollins as asserted by the Examiner, too. To the contrary, as illustrated in Figures 4-6, the coils 17-19 are adjacent to a flat end surface of the ring-shaped magnet system (constituted of several magnet segments 26 as shown in Fig. 2), but not at the outer peripheral area and not coaxially with the ring. Therefore, with their respective additional distinguishing features, the patentability of these claims is further strengthened.

The applicants respectfully request reconsideration in view of the above remarks and amendments. The Examiner is authorized to deduct additional fees believed due from our Deposit Account No. 11-0223.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal service as first class mail, in a postage prepaid envelope, addressed to Box Non-Fee Amendment, Commissioner for Patents, Washington, D.C. 20231 on June 6, 2003.

Dated June 6, 2003 Signed Fern Pekarofski Print Name Fern Pekarofski

MARKED-UP VERSION OF THE AMENDED CLAIMS 10

10. (Amended) An electroacoustic transducer, comprising:

a magnet system for generating a useful magnetic field and a stray magnetic field;

sound generating means for generating acoustic sound wave, said sound generating means comprising a first coil placed in one of said two magnetic fields; and

vibration means for generating vibration perceptible by an user, said vibration means comprising one or more second coils placed in the other of said two magnetic fields.